New claims:

1. A process for preparing polyethylene glycol with a residual content of less than 30 ppm aldehyde, determined as formaldehyde as specified in Ph. Eur. "macrogols" monograph 07/2003:1444, by ethoxylation of triethylene glycol in the presence of a basic catalyst, which comprises a triethylene glycol which is obtained by distillation from a glycol mixture consisting substantially of mono-, di-, triethylene glycol and higher glycols, at a pressure of from 5 to 10 hPa and a temperature of from 140 to 160°C, being emplolyed.

2. The process as claimed in claim 1, wherein the polyethylene glycol has a residual content of less than 15 ppm aldehyde.

3. The process as claimed in claim 1 or 2, wherein the polyethylene glycol has an average molar mass of from 190 to 40 000.

4. The process as claimed in claim 1 or 2, wherein the polyethylene glycol has an average molar mass of from 190 to 210.

5. The process for preparing polyethylene glycol as claimed in one or more of claims 1 to 4, by ethoxylation of triethylene glycol in the presence of a basic catalyst, wherein a triethylene glycol which is obtained by distillation from a glycol mixture consisting substantially of mono-, di-, triethylene glycol and higher glycols, at a pressure of 5 hPa and a temperature of 140°C, being emplolyed.

6. The process as claimed in any of claims 1 to 5, wherein a dried alkali metal hydroxide or alkaline earth metal hydroxide being emplolyed as basic catalyst.

7. The process as claimed in any of claims 1 to 6, wherein dried sodium hydroxide being emplolyed as basic catalyst.

8. A product obtainable by a process as claimed in one or more of claims 1 to 7.

9. The use of the product as claimed in claim 8 as auxiliary or active ingredient in cosmetic and pharmaceutical preparations.